



US Army Corps
of Engineers
Alaska District

Public Notice of Application for Permit

Regulatory Division (1145)
CEPDA-RD
Post Office Box 6898
Elmendorf AFB, Alaska 99506-0898

PUBLIC NOTICE DATE: May 4, 2007

EXPIRATION DATE: June 5, 2007

REFERENCE NUMBER: POA-2000-47-0

WATERWAY: Gastineau Channel

Interested parties are hereby notified that a Department of the Army permit application has been received for work in waters of the United States as described below and shown on the enclosed project drawings.

APPLICANT: City & Borough of Juneau, 155 South Seward Street, Juneau, Alaska 99801

AGENT: R&M Engineering, Incorporated, 6205 Glacier Highway, Juneau, Alaska 99801

LOCATION: The proposed project is located in Sections 15, 16, 21, and 22, T. 41. S., R. 67 E., Copper River Meridian; Latitude 58/314° N., Longitude 134.461° W., Juneau B-2 Alaska Quadrangle; along the beach below the High Tide Line and Mean High Water lines of Gastineau Channel, adjacent to North Douglas Highway, on Douglas Island, Juneau, Alaska.

SPECIAL AREA DESIGNATION: None

PURPOSE: The applicant's stated purpose is to complete Phase II of the North Douglas Sewer system to collect and deliver sewer water and material to an existing sewer treatment facility, for safe processing and disposal, by installing a buried sewer main pipeline, associated feeder lines, and lift stations below the High Tide Line of Gastineau Channel.

PROPOSED WORK:

a. Excavate and temporarily side-case approximately 8,870 cubic yards of materials into navigable waters of the U.S., and waters of the U.S., to facilitate the installation of approximately 2.12 miles of buried 4, 6 and 8 inch HDPE pressure sewer pipes. The proposed project would temporarily impact approximately 8.8 acres of waters of the U.S. Those excavated materials not used as backfill for the buried sewer line would be removed and disposed of at an upland disposal location.

- c. Install two sewerage lift stations with generator buildings.
- d. Install 53 lateral service sewer pipes to adjacent lots, homes and trailer parks.
- e. All work would be accomplished in accordance with the attached application, Sheets 1-3, dated April 25, 2007, and the attached plans and drawings, Sheets 1-22, April 26, 2007.

ADDITIONAL INFORMATION: For additional information about this proposed project, please contact the agent, Mr. George Porter, R&M Engineering, Inc., 6205 Glacier Highway, Juneau, Alaska 99801, at (907) 780-6060.

MITIGATION: The applicant has not proposed any mitigation, but has proposed the following measures during construction to reduce impacts to the aquatic environment:

- a. All excavated materials not utilized as back fill would be removed and disposed of at an upland location.
- b. Excavation and fill work would be accomplished during low tidal periods when site is dewatered, to the maximum extent practicable.
- c. Once pipeline installation is complete, the site shall be covered with back fill and returned to original contours.
- d. Use of a filter cloth under the fill pad materials.
- e. Use of straw bales and filter fabric, as needed, to reduce siltation effects.

WATER QUALITY CERTIFICATION: A permit for the described work will not be issued until a certification or waiver of certification, as required under Section 401 of the Clean Water Act (Public Law 95-217), has been received from the Alaska Department of Environmental Conservation.

COASTAL ZONE MANAGEMENT ACT CERTIFICATION: Section 307(c)(3) of the Coastal Zone, Management Act of 1972, as amended by 16 U.S.C. 1456(c)(3), requires the applicant to certify the described activity affecting land or water uses in the Coastal Zone complies with the Alaska Coastal Management Program. A permit will not be issued until the Office of Project Management and Permitting, Department of Natural Resources has concurred with the applicant's certification.

CULTURAL RESOURCES: The latest published version of the Alaska Heritage Resources Survey (AHRS) has been consulted for the presence or absence of historic properties, including those listed in or eligible for inclusion in the National Register of Historic Places. There are no listed or eligible properties in the vicinity of the worksite. Consultation of the AHRS constitutes the extent of cultural resource investigations by the District Commander at this time, and he is otherwise unaware of the presence of such resources. This application is being coordinated with the State Historic Preservation Office (SHPO). Any comments SHPO may have concerning presently unknown archeological or historic data that may be lost or destroyed by work under the requested permit will be considered in our final assessment of the described work.

ENDANGERED SPECIES: The project area is within the known or historic range of the Humpback whale and Stellar sea lion.

Preliminarily, the described activity will not affect threatened or endangered species, or modify their designated critical habitat, under the Endangered Species

Act of 1973 (87 Stat. 844). This application is being coordinated with the U.S. Fish and Wildlife Service and the National Marine Fisheries Service (NMFS). Any comments they may have concerning endangered or threatened wildlife or plants or their critical habitat will be considered in our final assessment of the described work.

ESSENTIAL FISH HABITAT: The Magnuson-Stevens Fishery Conservation and Management Act, as amended by the Sustainable Fisheries Act of 1996, requires all Federal agencies to consult with the NMFS on all actions, or proposed actions, permitted, funded, or undertaken by the agency, that may adversely affect Essential Fish Habitat (EFH).

Preliminarily, the described activity may affect EFH in the project area. This Public Notice initiates EFH consultation with the NMFS. Any comments or recommendations they may have concerning EFH will be considered in our final assessment of the described work.

TRIBAL CONSULTATION: The Alaska District fully supports tribal self-governance and government-to-government relations between Federally recognized Tribes and the Federal government. Tribes with protected rights or resources that could be significantly affected by a proposed Federal action (e.g., a permit decision) have the right to consult with the Alaska District on a government-to-government basis. Views of each Tribe regarding protected rights and resources will be accorded due consideration in this process. This Public Notice serves as notification to the Tribes within the area potentially affected by the proposed work and invites their participation in the Federal decision-making process regarding the protected Tribal right or resource. Consultation may be initiated by the affected Tribe upon written request to the District Commander during the public comment period.

PUBLIC HEARING: Any person may request, in writing, within the comment period specified in this notice, that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, reasons for holding a public hearing.

EVALUATION: The decision whether to issue a permit will be based on an evaluation of the probable impacts including cumulative impacts of the proposed activity and its intended use on the public interest. Evaluation of the probable impacts, which the proposed activity may have on the public interest, requires a careful weighing of all the factors that become relevant in each particular case. The benefits, which reasonably may be expected to accrue from the proposal, must be balanced against its reasonably foreseeable detriments. The outcome of the general balancing process would determine whether to authorize a proposal, and if so, the conditions under which it will be allowed to occur. The decision should reflect the national concern for both protection and utilization of important resources. All factors, which may be relevant to the proposal, must be considered including the cumulative effects thereof. Among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, floodplain values, land use, navigation, shore erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, considerations of property ownership, and, in general, the needs and welfare of the people. For activities involving 404 discharges, a permit will be denied if the discharge that would be authorized by such permit would not comply with the Environmental Protection Agency's 404(b)(1) guidelines. Subject to the preceding sentence and any other applicable guidelines or criteria (see Sections 320.2 and 320.3), a permit will be granted unless the District Commander determines that it would be contrary to the public interest.

The Corps of Engineers is soliciting comments from the public; Federal, State, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

Comments on the described work, with the reference number, should reach this office no later than the expiration date of this Public Notice to become part of the record and be considered in the decision. Please contact Garth Zimbelman at (907) 790-4490, or by email at Garth.A.Zimbelman@poa02.usace.army.mil if further information is desired concerning this notice.

AUTHORITY: This permit will be issued or denied under the following authorities:

(X) Perform work in or affecting navigable waters of the United States - Section 10 Rivers and Harbors Act 1899 (33 U.S.C. 403).

(X) Discharge dredged or fill material into waters of the United States - Section 404 Clean Water Act (33 U.S.C. 1344). Therefore, our public interest review will consider the guidelines set forth under Section 404(b) of the Clean Water Act (40 CFR 230).

() Transport dredged material for the purpose of dumping it into ocean waters - Section 103 Marine Protection, Research, and Sanctuaries Act of 1972 (33 U.S.C. 1413). Therefore, our public interest review will consider the criteria established under authority of Section 102(a) of the Marine Protection, Research and Sanctuaries Act of 1972, as amended (40 CFR Parts 220 to 229), as appropriate.

Project application, plans and drawings, Notice of Application for Certification of Consistency with the Alaska Coastal Management Program, and Notice of Application for State Water Quality Certification are enclosed with this Public Notice.

District Commander
U.S. Army, Corps of Engineers

Enclosures

STATE OF ALASKA

DEPARTMENT OF NATURAL RESOURCES
OFFICE OF PROJECT MANAGEMENT AND PERMITTING

OFFICE OF PROJECT MANAGEMENT AND PERMITTING
POST OFFICE BOX 111030, MS 1030
JUNEAU, ALASKA 99801-1030
PHONE: (907) 465-3562/FAX: (907) 465-3075

NOTICE OF APPLICATION
FOR
CERTIFICATION OF CONSISTENCY WITH THE
ALASKA COASTAL MANAGEMENT PROGRAM

Notice is hereby given that a request is being filed with the Office of Project Management and Permitting for a consistency determination, as provided in Section 307(c)(3) of the Coastal Zone Management Act of 1972, as amended [16 U.S.C. 1456(c)(3)], that the project described in the Corps of Engineers Public Notice No. POA-2000-47-O, Gastineau Channel, will comply with the Alaska Coastal Management Program and that the project will be conducted in a manner consistent with that program.

This project is being reviewed for consistency with the Alaska Coastal Management Program. Written comments about the consistency of the project with the applicable ACMP statewide standards and district policies must be submitted to the Office of Project Management and Permitting (OPMP). For information about this consistency review, contact OPMP at the address or phone number above, or visit the ACMP web site at <http://www.alaskacoast.state.ak.us/Projects/projects.html>.

STATE OF ALASKA

DEPT. OF ENVIRONMENTAL CONSERVATION
DIVISION OF WATER
401 Certification Program
Non-Point Source Water Pollution Control Program

DEPARTMENT OF ENVIRONMENTAL CONSERVATION
WQM/401 CERTIFICATION
410 WILLOUGHBY AVENUE
JUNEAU, ALASKA 99801-1795
PHONE: (907) 465-5321/FAX: (907) 465-5274

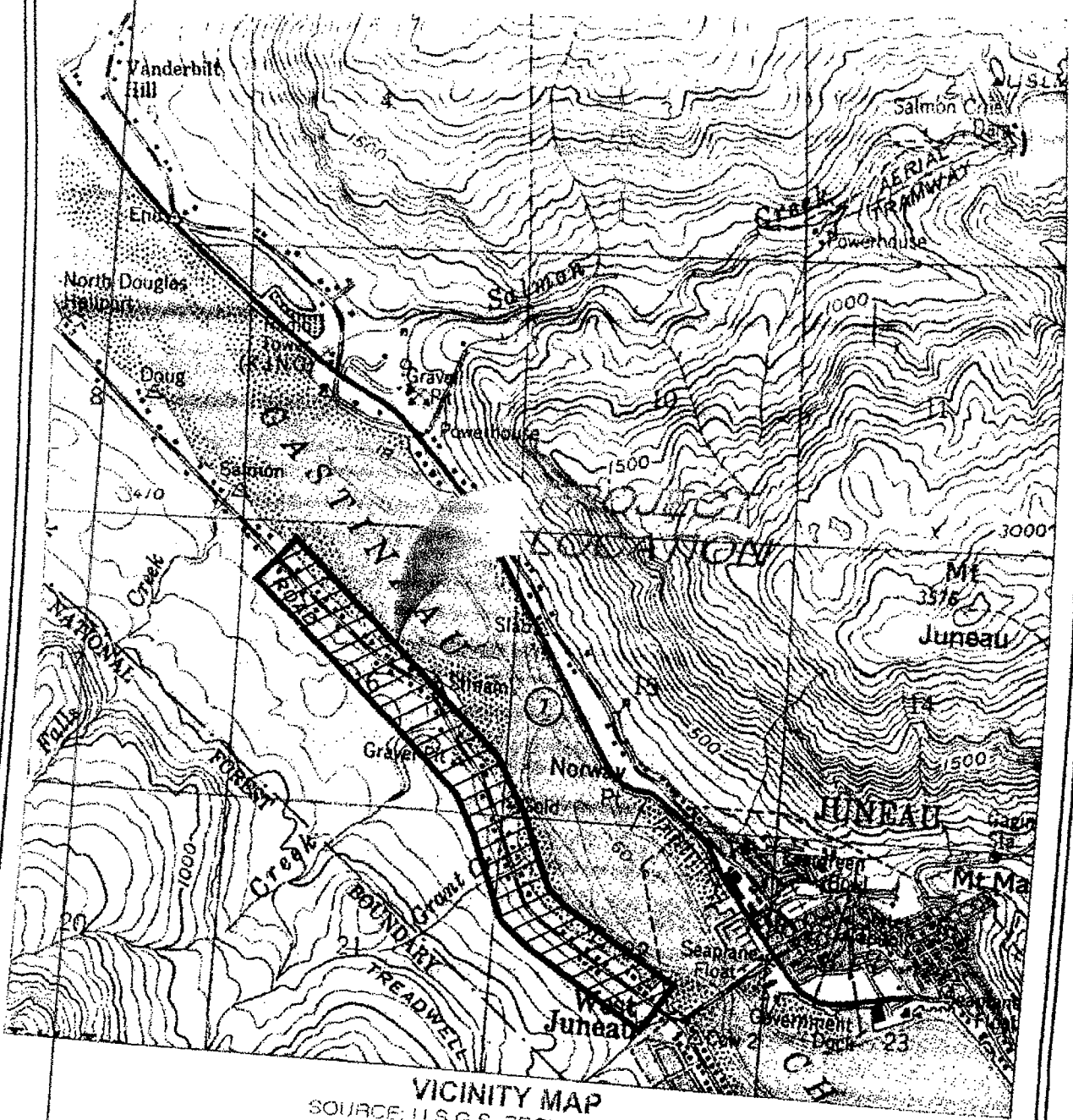
NOTICE OF APPLICATION FOR STATE WATER QUALITY CERTIFICATION

Any applicant for a federal license or permit to conduct an activity that might result in a discharge into navigable waters, in accordance with Section 401 of the Clean Water Act of 1977 (PL95-217), also must apply for and obtain certification from the Alaska Department of Environmental Conservation that the discharge will comply with the Clean Water Act, the Alaska Water Quality Standards, and other applicable State laws. By agreement between the U.S. Army Corps of Engineers and the Department of Environmental Conservation, application for a Department of the Army permit to discharge dredged or fill material into navigable waters under Section 404 of the Clean Water Act also may serve as application for State Water Quality Certification.

Notice is hereby given that the application for a Department of the Army Permit described in the Corps of Engineers' Public Notice No. POA-2000-47-O, Gastineau Channel, serves as application for State Water Quality Certification from the Department of Environmental Conservation.

After reviewing the application, the Department may certify there is reasonable assurance the activity, and any discharge that might result, will comply with the Clean Water Act, the Alaska Water Quality Standards, and other applicable State laws. The Department also may deny or waive certification.

Any person desiring to comment on the project, with respect to Water Quality Certification, may submit written comments to the address above by the expiration date of the Corps of Engineer's Public Notice.



VICINITY MAP
SOURCE: U.S.G.S. PROVISIONAL MAP
JUNEAU (8-2) S.E., ALASKA
SCALE: 1"=2640'
CONTOUR INTERVAL: 100 FEET
DATE: 1986

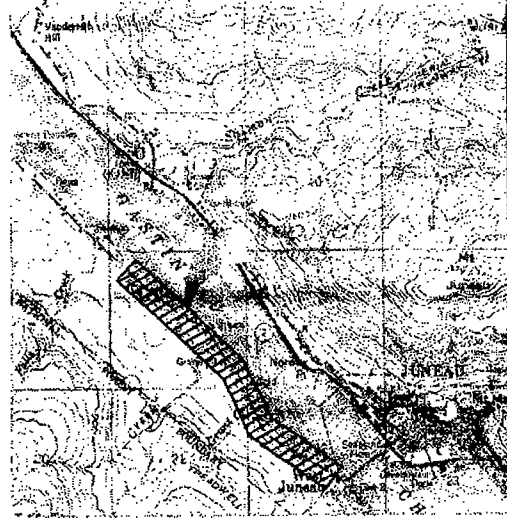
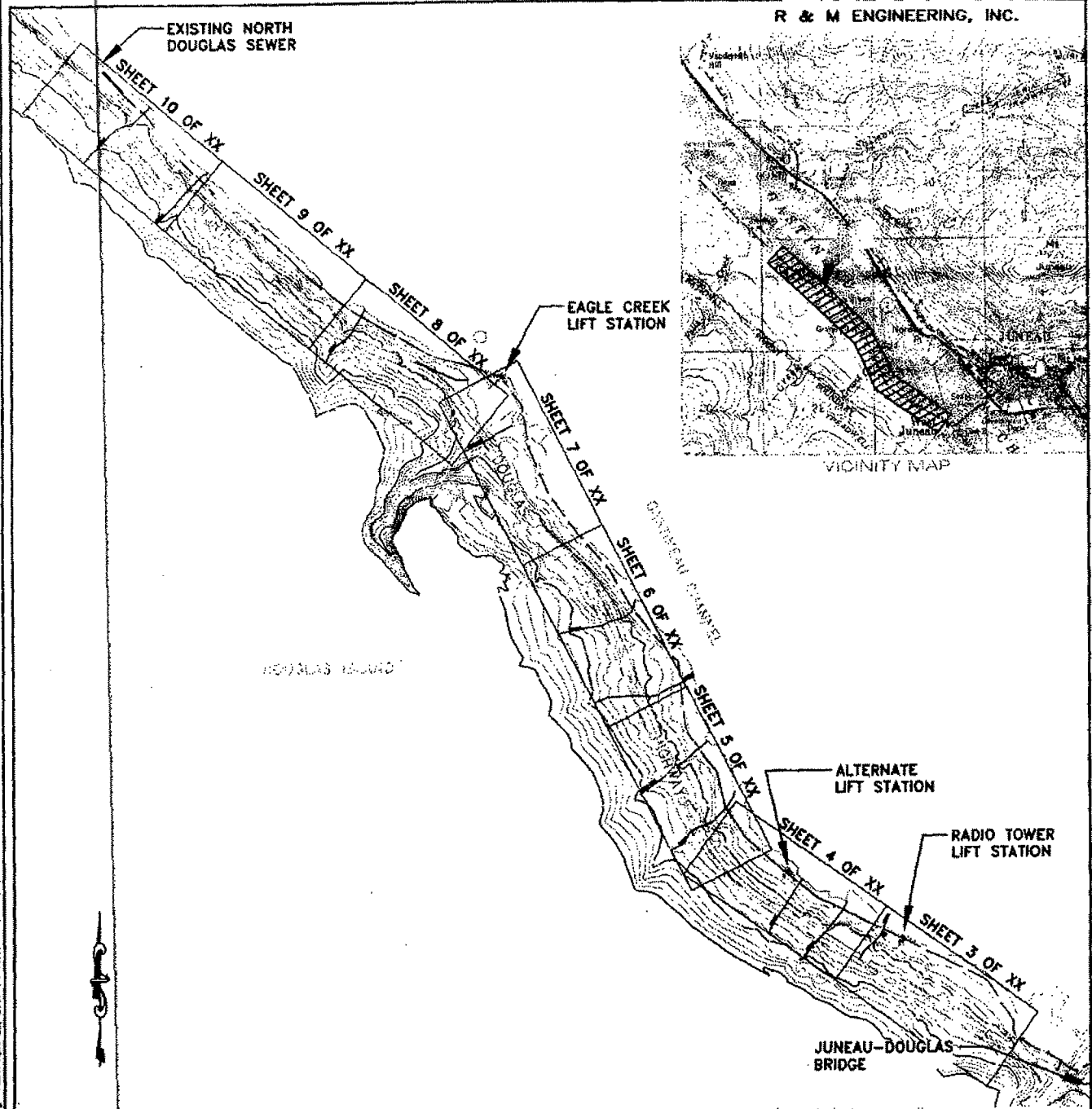
PURPOSE: Sanitary Sewer

NAME: R&M ENGINEERING INC.

PROPOSED/RETAIN: CORPS OF ENGINEER
APPLICANT

SITE DESIGN ADDRESS:
North Douglas, Douglas Island
Juneau, Alaska

W:\041\1\1\006 Ave. San. Sew. 18 20 Utility mapping PL071 April 23, 2007 06:11:00m AutoCAD



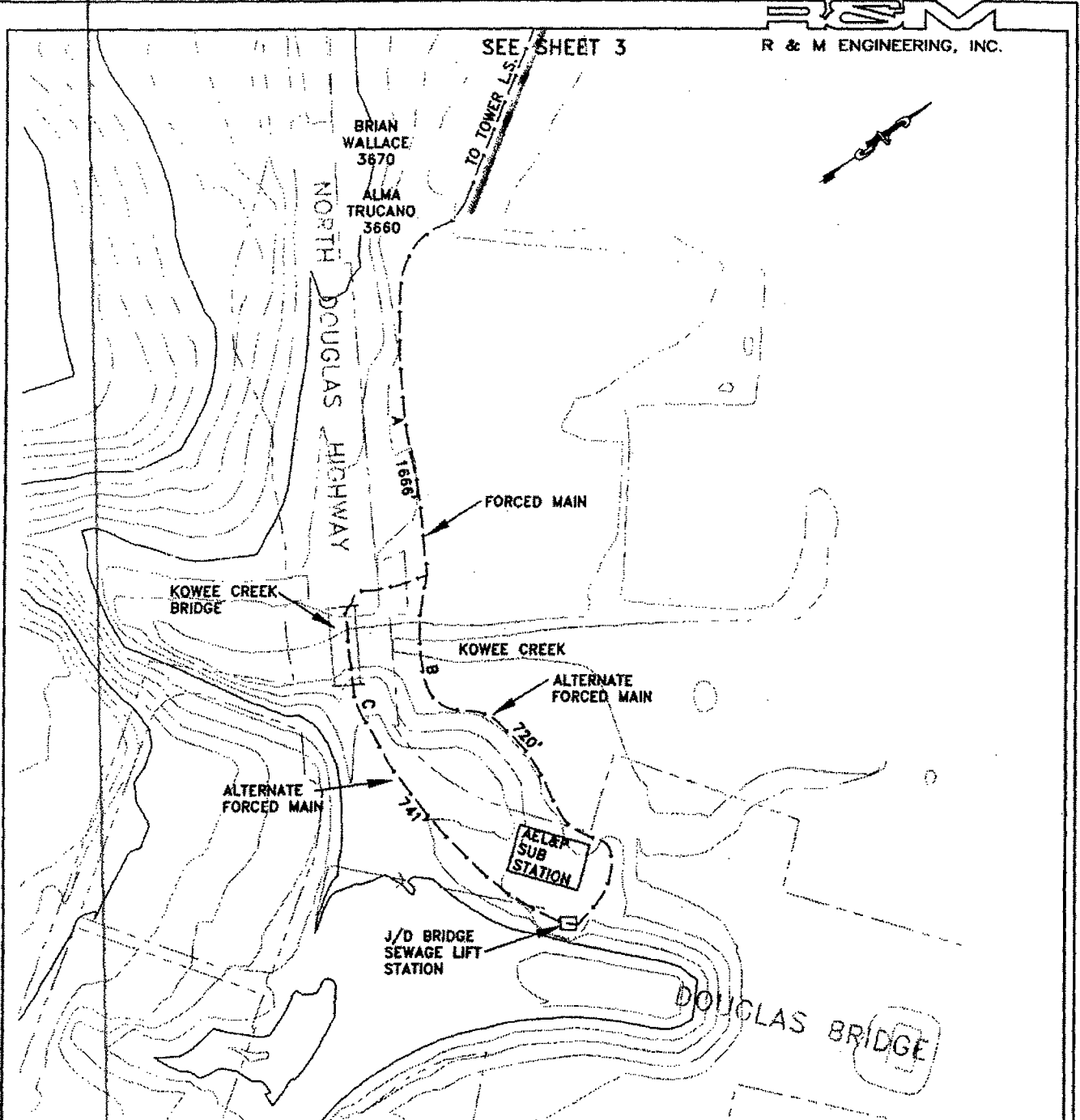
- LEGEND**
- SANITARY SEWER
 - FORCE MAIN
 - MEAN HIGH WATER LINE
 - PROPERTY LINES

Date Prepared: MARCH 16, 2007	Applicant: CITY AND BOROUGH OF JUNEAU
NORTH DOUGLAS SEWER	
Project: NORTH DOUGLAS SEWER	
Location: Sec. 16,21,22, T. 41S., R. 67E., CRM NORTH DOUGLAS, JUNEAU, ALASKA	
Waterway: GASTINEAU CHANNEL	
Scale: 1"= 1200'	Prepared by: R&M ENGINEERING
SHEET 3 OF 22	KEY MAP

City & Borough of Juneau POA-2000-47-O
Gastineau Channel Sheet 3 of 22
04/26/07

I:\3000\041311-2\000 Area E&F\2006 Permit\Drawings\Key Map.dwg PLOT: April 23, 2007 at 11:52am Administrator

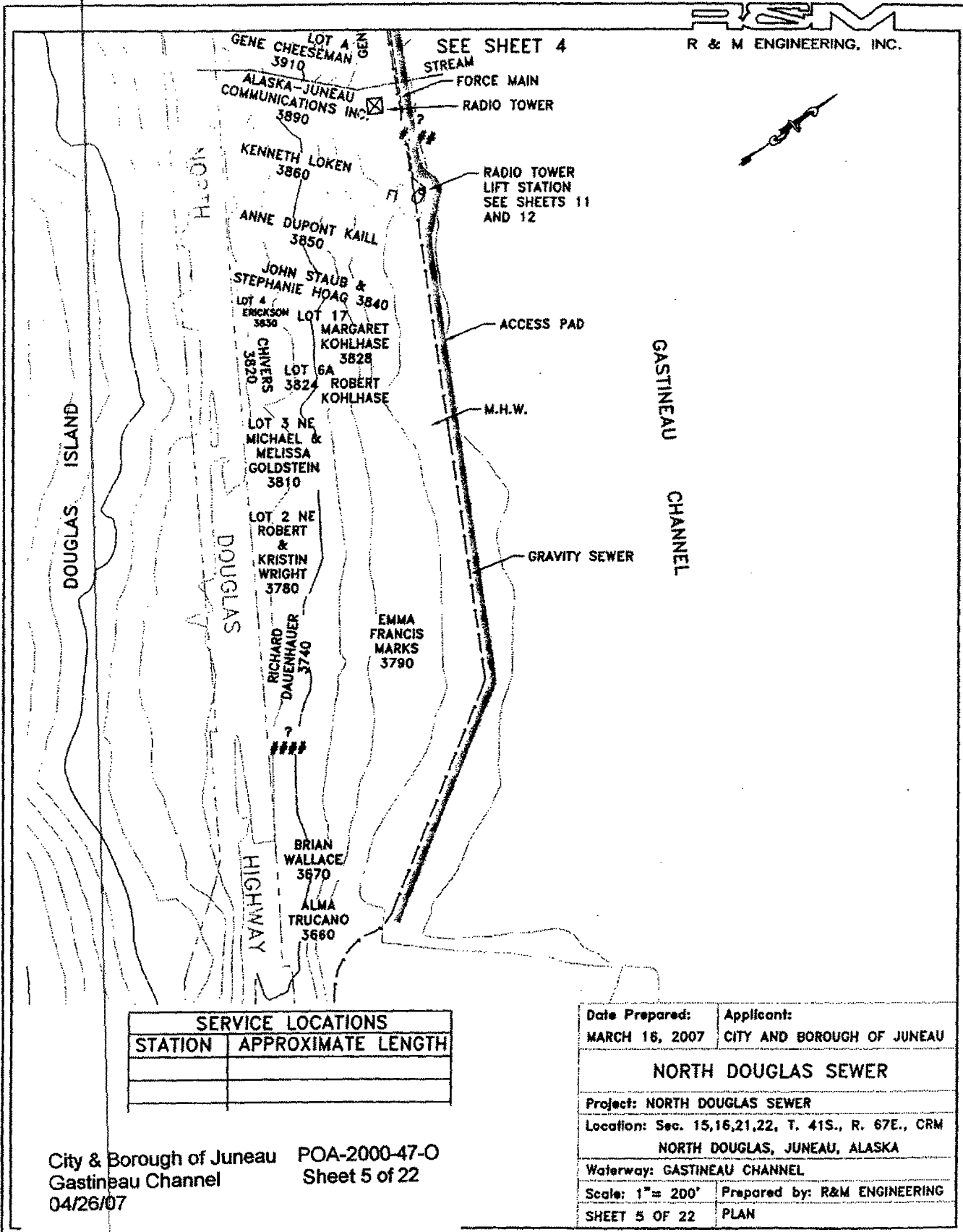
SEE SHEET 3



SERVICE LOCATIONS	
STATION	APPROXIMATE LENGTH

Date Prepared:	Applicant:
MARCH 16, 2007	CITY AND BOROUGH OF JUNEAU
NORTH DOUGLAS SEWER	
Project: NORTH DOUGLAS SEWER	
Location: Sec. 15,16,21,22, T. 41S., R. 67E., CRM	
NORTH DOUGLAS, JUNEAU, ALASKA	
Waterway: GASTINEAU CHANNEL	
Scale: 1"= 200'	Prepared by: R&M ENGINEERING
SHEET 4 OF 22	PLAN

City & Borough of Juneau POA-2000-47-O
Gastineau Channel Sheet 4 of 22
04/26/07



SERVICE LOCATIONS	
STATION	APPROXIMATE LENGTH

Date Prepared:	Applicant:
MARCH 16, 2007	CITY AND BOROUGH OF JUNEAU
NORTH DOUGLAS SEWER	
Project: NORTH DOUGLAS SEWER	
Location: Sec. 15,16,21,22, T. 41S., R. 67E., CRM NORTH DOUGLAS, JUNEAU, ALASKA	
Waterway: GASTINEAU CHANNEL	
Scale: 1" = 200'	Prepared by: R&M ENGINEERING
SHEET 5 OF 22	PLAN

City & Borough of Juneau POA-2000-47-O
Gastineau Channel Sheet 5 of 22
04/26/07

SEE SHEET 5

RICHARD &
KRISTINA RITTER
4220

U.S.S. 1361

NIELS &
WILHELMINE LARSEN

- ACCESS PAD

M.H.W.

ALTERNATE
LIFT STATION
SEE SHEETS
15 AND 16

- GRAVITY SEWER

- FORCE MAIN

SEE SHEET 3

SERVICE LOCATIONS	
STATION	APPROXIMATE LENGTH

Date Prepared:
MARCH 16, 2007

Applicant:
CITY AND BOROUGH OF JUNEAU

NORTH DOUGLAS SEWER

Project: NORTH DOUGLAS SEWER

Location: Sec. 15,16,21,22, T. 41S., R. 67E., CRM
NORTH DOUGLAS, JUNEAU, ALASKA

Waterway: GASTINEAU CHANNEL

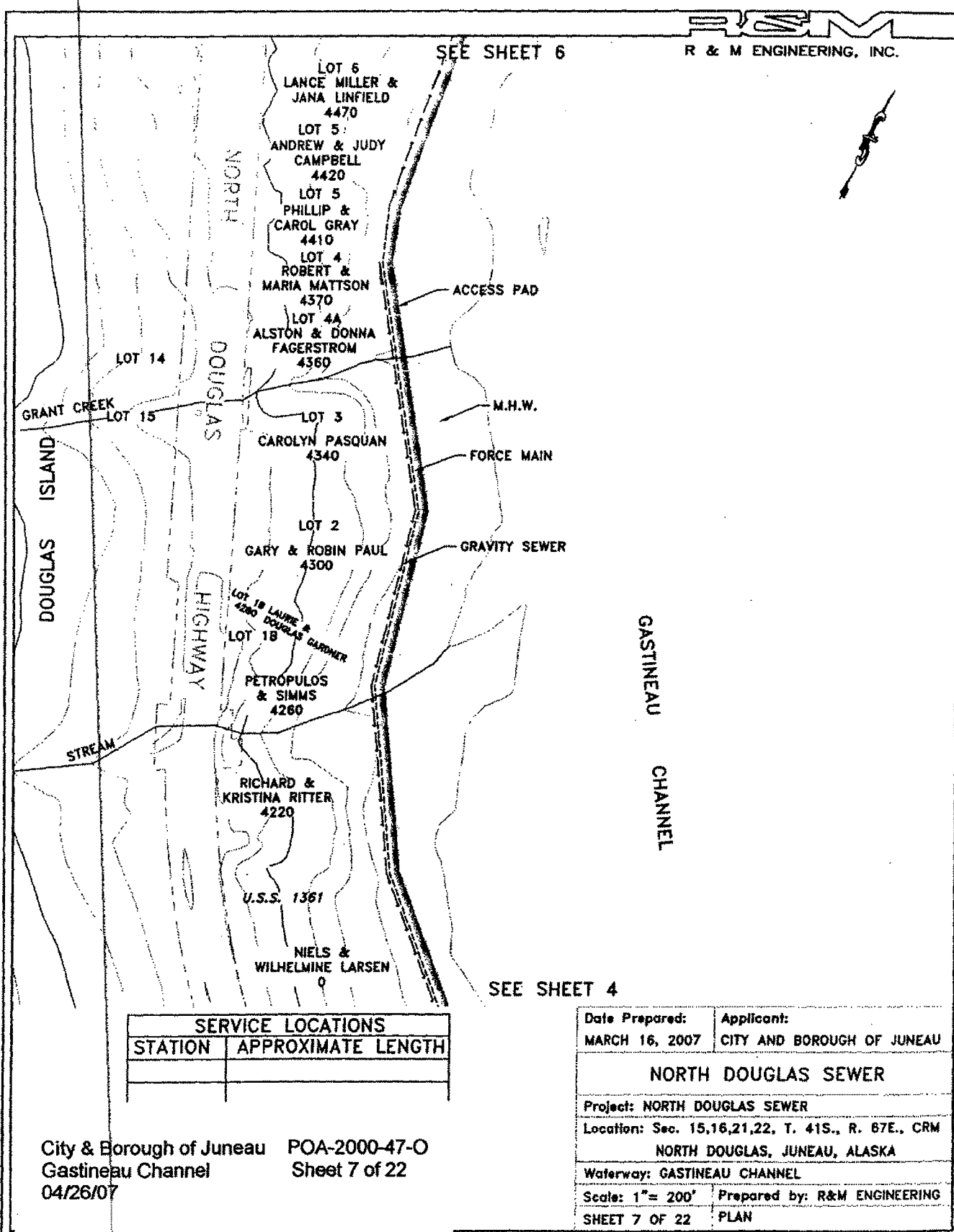
Scale: 1" = 200' Prepared by: R&M ENGINEERING

SHEET 6 OF 22 PLAN

City & Borough of Juneau
Gastineau Channel
04/26/07

C:\2004\041311-1\002 Arns CAP\2002 Permit Drawings.dwg #LST: April 23, 2007 4:11:32pm Administrator

SEE SHEET 6



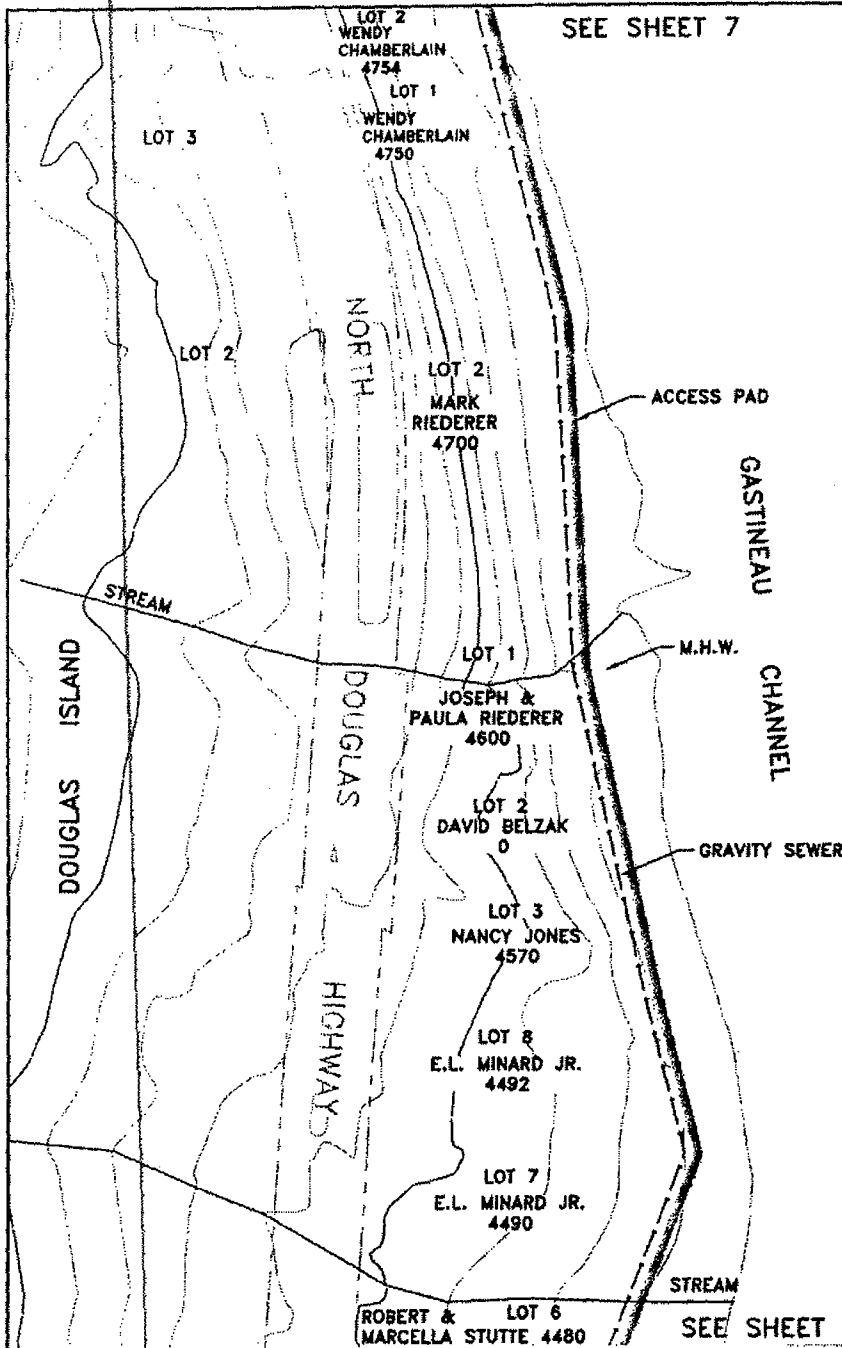
SERVICE LOCATIONS	
STATION	APPROXIMATE LENGTH

SEE SHEET 4

Date Prepared:	Applicant:
MARCH 16, 2007	CITY AND BOROUGH OF JUNEAU
NORTH DOUGLAS SEWER	
Project: NORTH DOUGLAS SEWER	
Location: Sec. 15,16,21,22, T. 41S., R. 67E., CRM NORTH DOUGLAS, JUNEAU, ALASKA	
Waterway: GASTINEAU CHANNEL	
Scale: 1" = 200'	Prepared by: R&M ENGINEERING
SHEET 7 OF 22	PLAN

City & Borough of Juneau POA-2000-47-O
Gastineau Channel Sheet 7 of 22
04/26/07

SEE SHEET 7

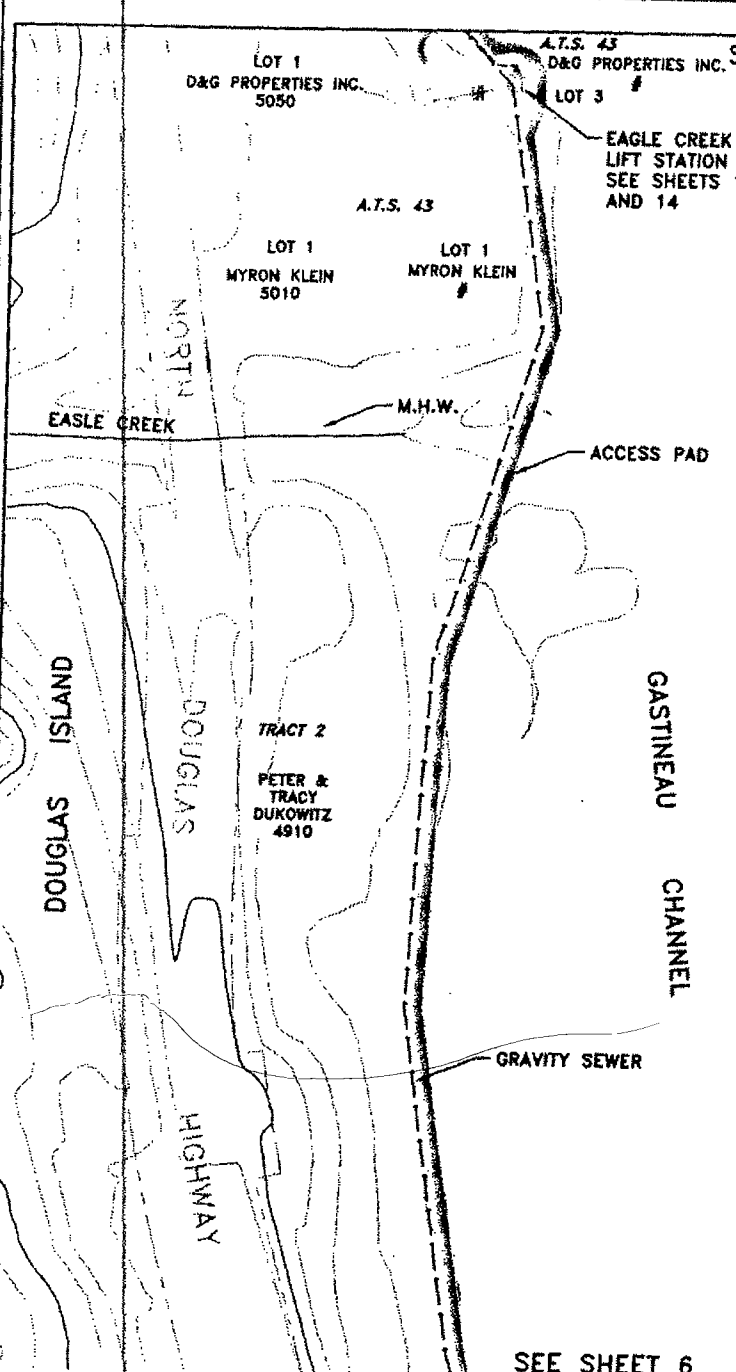
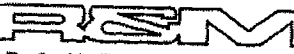


SEE SHEET 5

SERVICE LOCATIONS	
STATION	APPROXIMATE LENGTH

City & Borough of Juneau POA-2000-47-O
Gastineau Channel Sheet 8 of 22
04/26/07

Date Prepared:	Applicant:
MARCH 16, 2007	CITY AND BOROUGH OF JUNEAU
NORTH DOUGLAS SEWER	
Project: NORTH DOUGLAS SEWER	
Location: Sec. 15,16,21,22, T. 41S., R. 67E., CRM NORTH DOUGLAS, JUNEAU, ALASKA	
Waterway: GASTINEAU CHANNEL	
Scale: 1" = 200'	Prepared by: R&M ENGINEERING
SHEET 8 OF 22	PLAN



SEE SHEET 8 R & M ENGINEERING, INC.

SEE SHEET 6

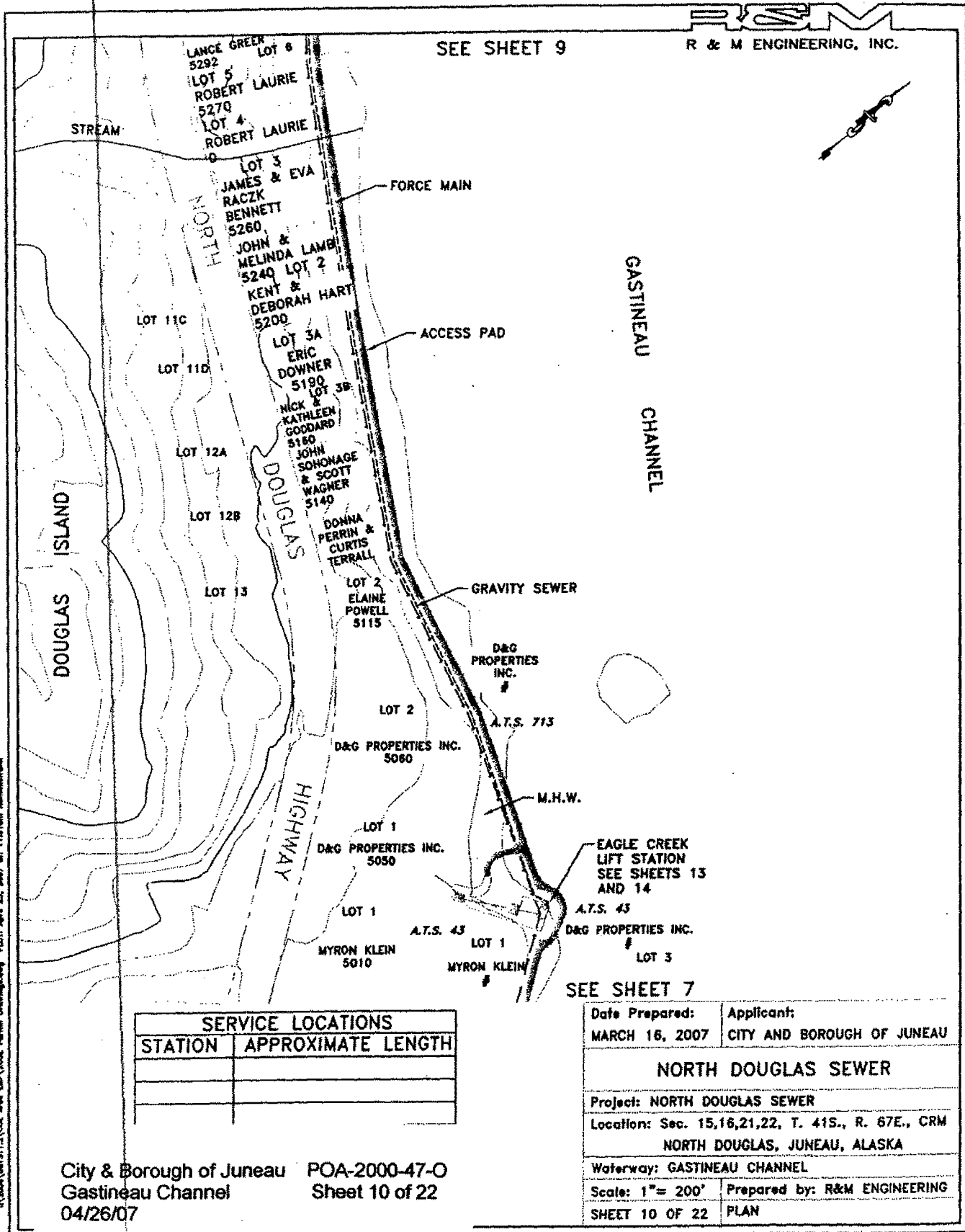
SERVICE LOCATIONS	
STATION	APPROXIMATE LENGTH

City & Borough of Juneau POA-2000-47-O
Gastineau Channel Sheet 9 of 22
04/26/07

Date Prepared:	Applicant:
MARCH 16, 2007	CITY AND BOROUGH OF JUNEAU
NORTH DOUGLAS SEWER	
Project: NORTH DOUGLAS SEWER	
Location: Sec. 15,16,21,22, T. 41S., R. 67E., CRM NORTH DOUGLAS, JUNEAU, ALASKA	
Waterway: GASTINEAU CHANNEL	
Scale: 1"= 200'	Prepared by: R&M ENGINEERING
SHEET 9 OF 22	PLAN

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SEE SHEET 9



SERVICE LOCATIONS	
STATION	APPROXIMATE LENGTH

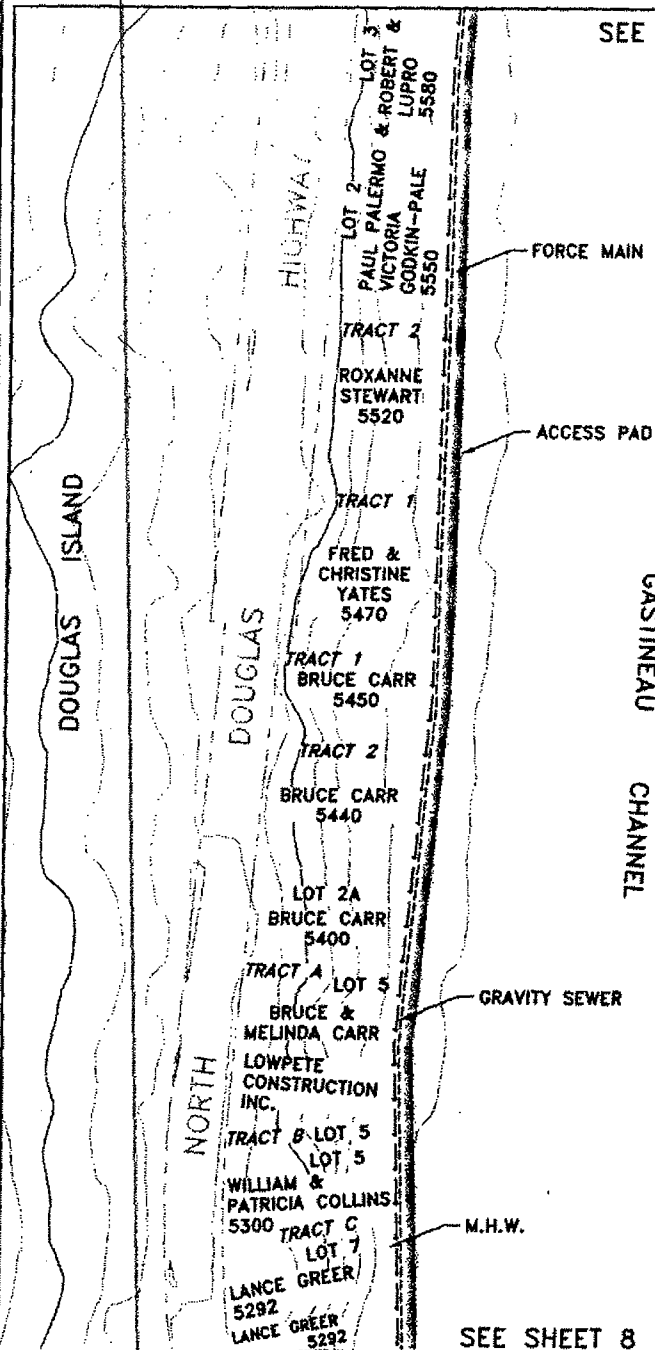
SEE SHEET 7

Date Prepared:	Applicant:
MARCH 16, 2007	CITY AND BOROUGH OF JUNEAU
NORTH DOUGLAS SEWER	
Project: NORTH DOUGLAS SEWER	
Location: Sec. 15,16,21,22, T. 41S., R. 67E., CRM NORTH DOUGLAS, JUNEAU, ALASKA	
Waterway: GASTINEAU CHANNEL	
Scale: 1"= 200'	Prepared by: R&M ENGINEERING
SHEET 10 OF 22	PLAN

City & Borough of Juneau POA-2000-47-O
Gastineau Channel Sheet 10 of 22
04/26/07

SEE SHEET 10

R&M
R & M ENGINEERING, INC.



SEE SHEET 8

SERVICE LOCATIONS	
STATION	APPROXIMATE LENGTH

City & Borough of Juneau POA-2000-47-O
Gastineau Channel Sheet 11 of 22
04/26/07

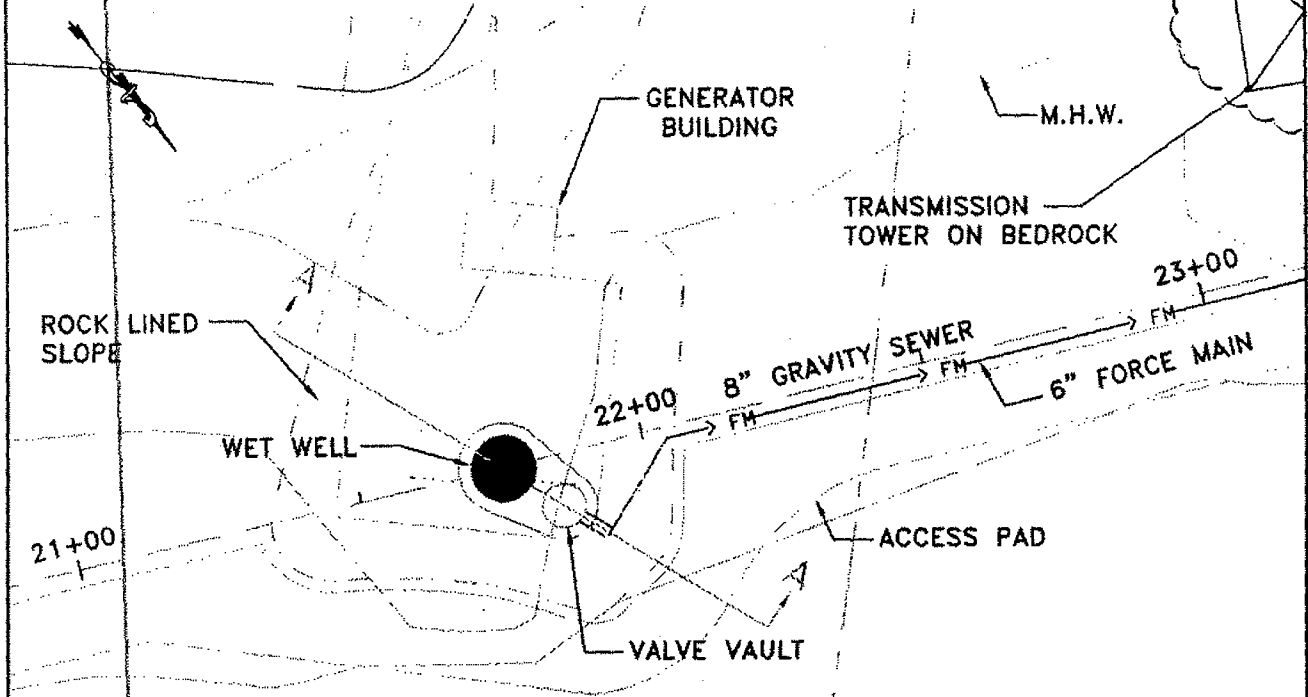
Date Prepared:	Applicant:
MARCH 16, 2007	CITY AND BOROUGH OF JUNEAU
NORTH DOUGLAS SEWER	
Project: NORTH DOUGLAS SEWER	
Location: Sec. 15,16,21,22, T. 41S., R. 67E., CRM NORTH DOUGLAS, JUNEAU, ALASKA	
Waterway: GASTINEAU CHANNEL	
Scale: 1"= 200'	Prepared by: R&M ENGINEERING
SHEET 11 OF 22	PLAN

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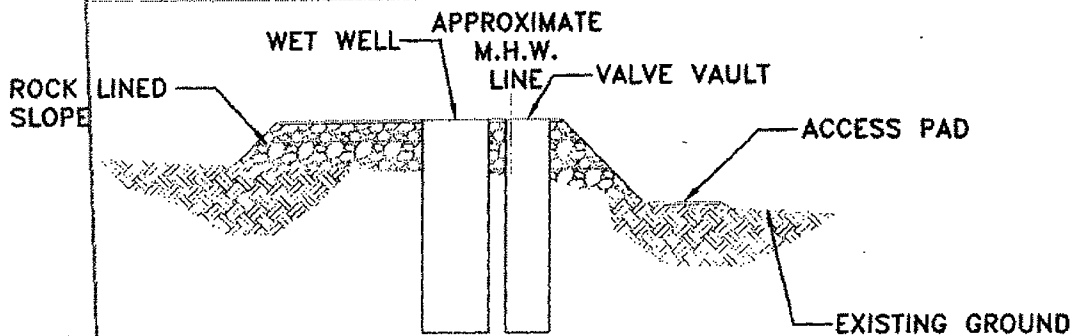


City & Borough of Juneau
Gastineau Channel
04/26/07

Date Prepared:	Applicant:
MARCH 16, 2007	CITY AND BOROUGH OF JUNEAU
NORTH DOUGLAS SEWER	
Project: NORTH DOUGLAS SEWER	
Location: Sec. 15,16,21,22, T. 41S., R. 67E., CRM NORTH DOUGLAS, JUNEAU, ALASKA	
Waterway: GASTINEAU CHANNEL	
Scale: 1" = 200'	Prepared by: R&M ENGINEERING
SHEET 12 OF 22	PLAN



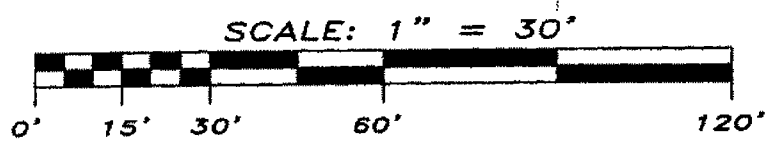
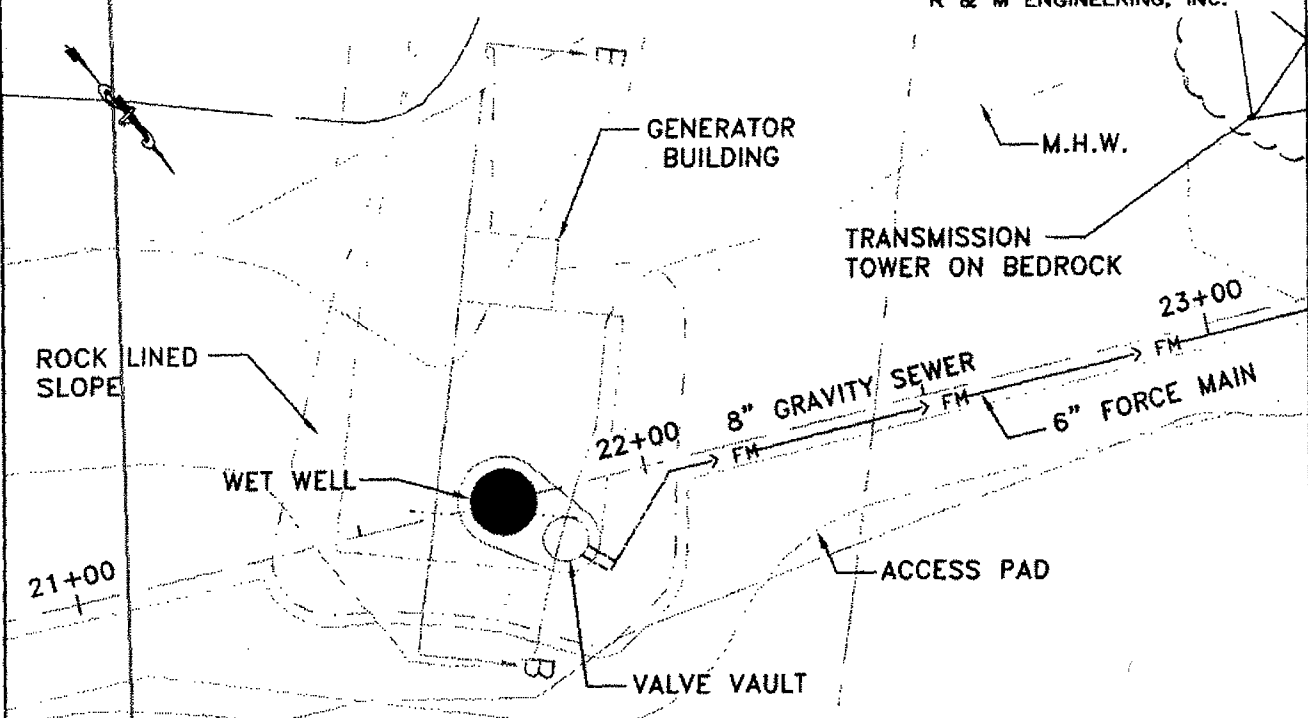
RADIO TOWER LIFT STATION SITE PLAN



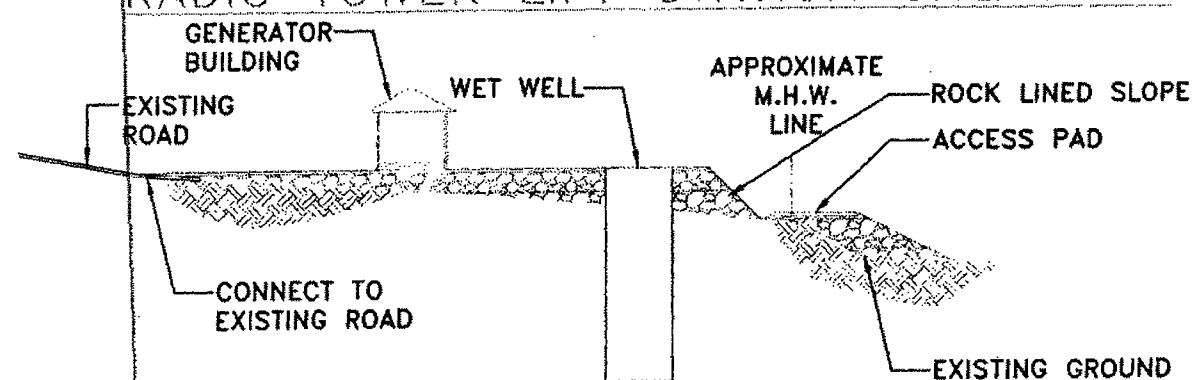
SECTION A-A NOT TO SCALE

Date Prepared: MARCH 16, 2007	Applicant: CITY AND BOROUGH OF JUNEAU
NORTH DOUGLAS SEWER	
Project: NORTH DOUGLAS SEWER	
Location: Sec. 15,16,21,22, T. 41S., R. 67E., CRM NORTH DOUGLAS, JUNEAU, ALASKA	
Waterway: GASTINEAU CHANNEL	
Scale: 1" = 30'	Prepared by: R&M ENGINEERING
SHEET 13 OF 22	SITE PLAN AND SECTION

R & M ENGINEERING, INC.



RADIO TOWER LIFT STATION SITE PLAN



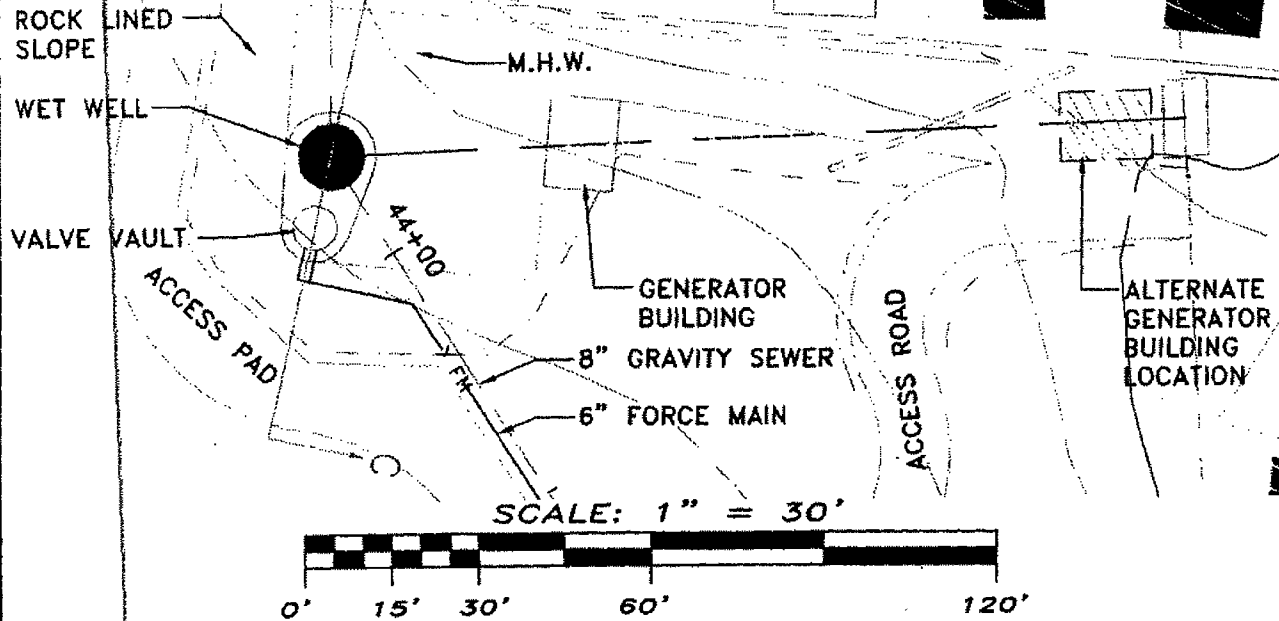
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Date Prepared: MARCH 16, 2007	Applicant: CITY AND BOROUGH OF JUNEAU
Project: NORTH DOUGLAS SEWER	
Location: Sec. 15,16,21,22, T. 41S., R. 67E., CRM NORTH DOUGLAS, JUNEAU, ALASKA	
Waterway: GASTINEAU CHANNEL	
Scale: 1" = 30'	Prepared by: R&M ENGINEERING
SHEET 14 OF 22	SITE PLAN AND SECTION

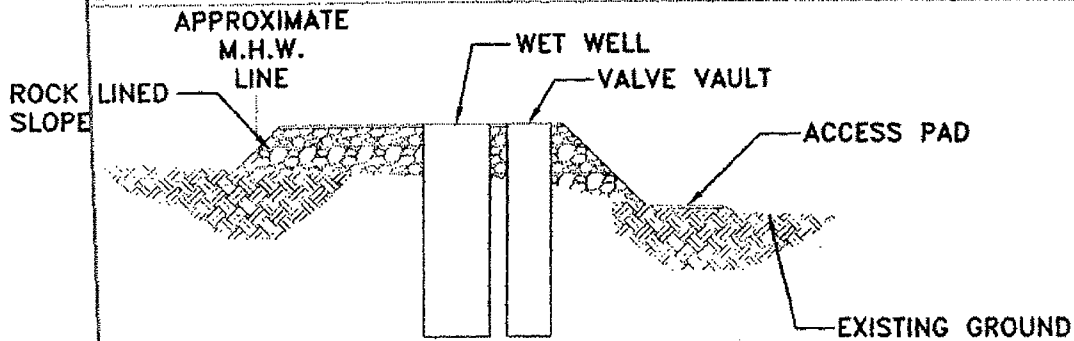
City & Borough of Juneau POA-2000-47-O
Gastineau Channel Sheet 14 of 22
04/26/07

IN 00005/041311.2/000 Area 68A/0000 Permit/Design/Drawn PLOT: April 23, 2007 at 11:50am Administrator

R & M ENGINEERING, INC.



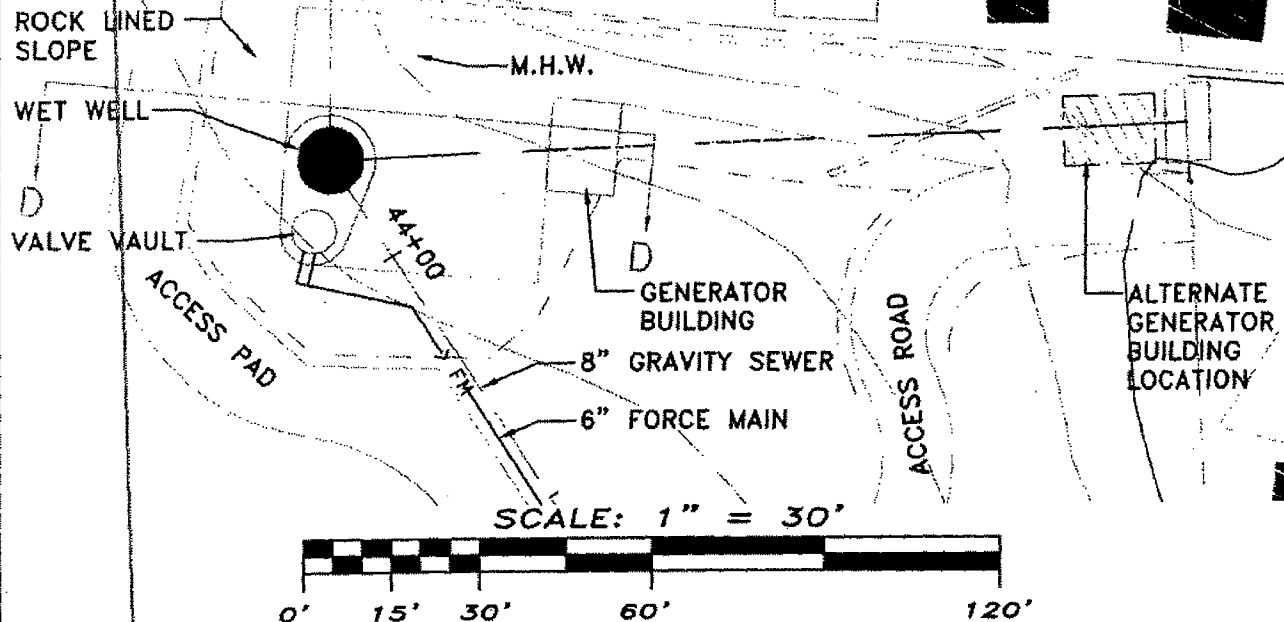
EAGLE CREEK LIFT STATION SITE PLAN



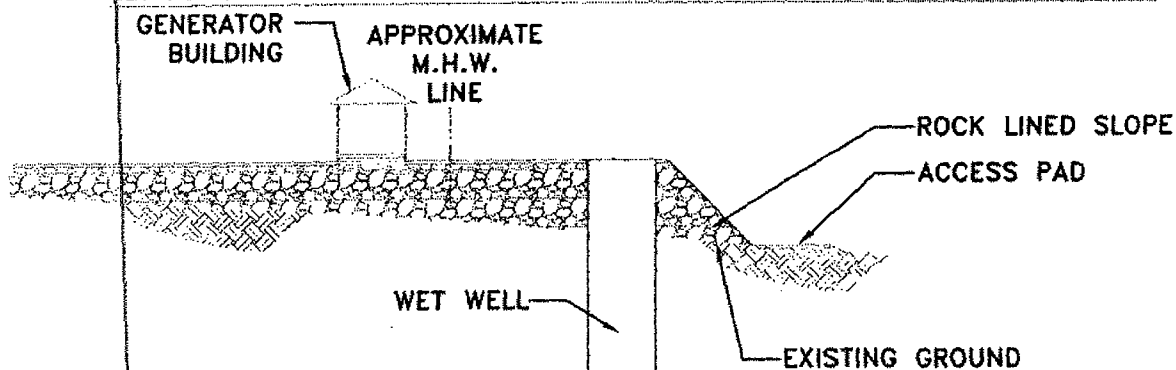
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Date Prepared:	Applicant:
MARCH 16, 2007	CITY AND BOROUGH OF JUNEAU
NORTH DOUGLAS SEWER	
Project: NORTH DOUGLAS SEWER	
Location: Sec. 15,16,21,22, T. 41S., R. 67E., CRM NORTH DOUGLAS, JUNEAU, ALASKA	
Waterway: GASTINEAU CHANNEL	
Scale: 1"= 30'	Prepared by: R&M ENGINEERING
SHEET 15 OF 22	SITE PLAN AND SECTION

City & Borough of Juneau POA-2000-47-O
Gastineau Channel Sheet 15 of 22
04/26/07



EAGLE CREEK LIFT STATION SITE PLAN

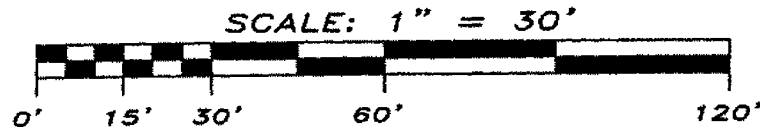
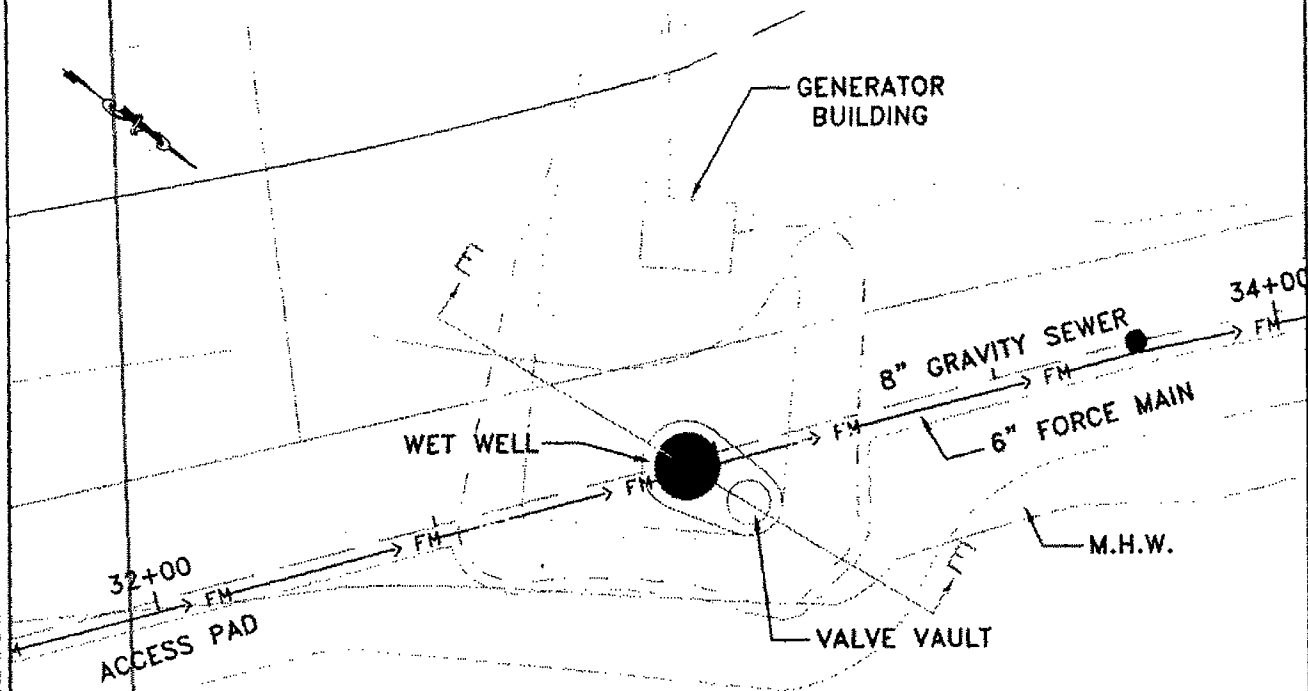


SECTION D-D NOT TO SCALE

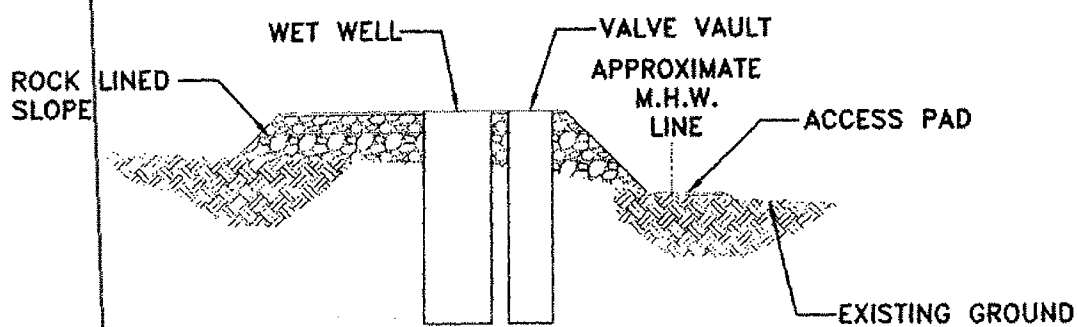
Date Prepared: MARCH 16, 2007	Applicant: CITY AND BOROUGH OF JUNEAU
NORTH DOUGLAS SEWER	
Project: NORTH DOUGLAS SEWER	
Location: Sec. 15,16,21,22, T. 41S., R. 67E., CRM NORTH DOUGLAS, JUNEAU, ALASKA	
Waterway: GASTINEAU CHANNEL	
Scale: 1" = 30'	Prepared by: R&M ENGINEERING
SHEET 16 OF 22	SITE PLAN AND SECTION

City & Borough of Juneau
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ALTERNATE LIFT STATION SITE PLAN

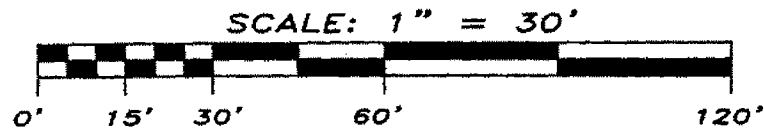
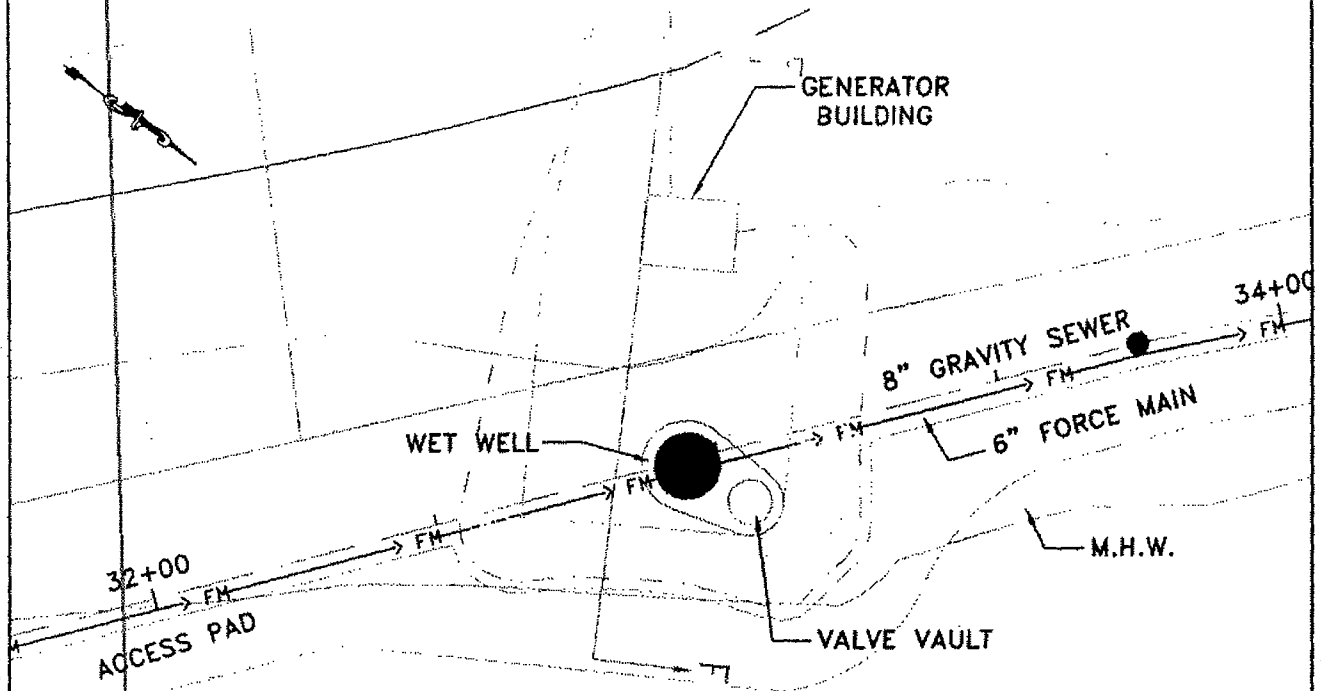


SECTION E-E NOT TO SCALE

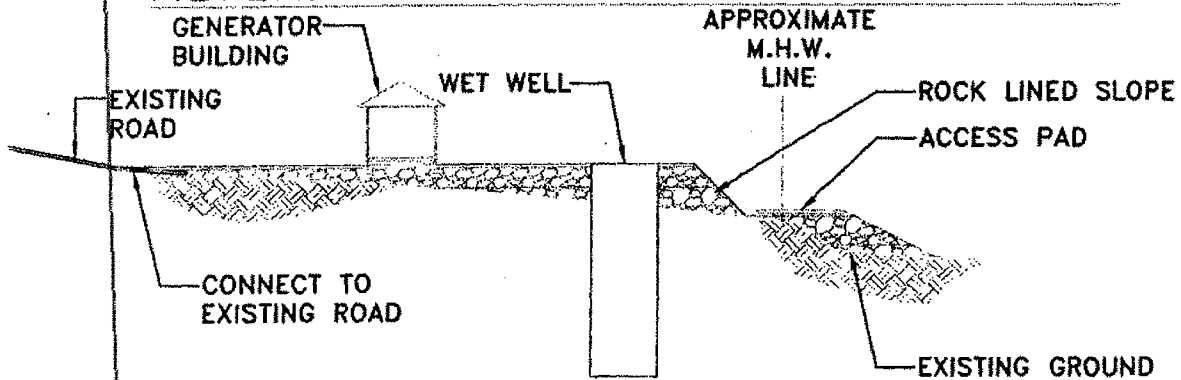
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Date Prepared: MARCH 16, 2007	Applicant: CITY AND BOROUGH OF JUNEAU
NORTH DOUGLAS SEWER	
Project: NORTH DOUGLAS SEWER	
Location: Sec. 15,16,21,22, T. 41S., R. 67E., CRM NORTH DOUGLAS, JUNEAU, ALASKA	
Waterway: GASTINEAU CHANNEL	
Scale: 1"= 30'	Prepared by: R&M ENGINEERING
SHEET 17 OF 22	SITE PLAN AND SECTION

N:\2004\041511\2\050 Area E&F\3000 Permit Designing.dwg PLOT: April 25, 2007 at 11:58am Administrator



ALTERNATE LIFT STATION SITE PLAN



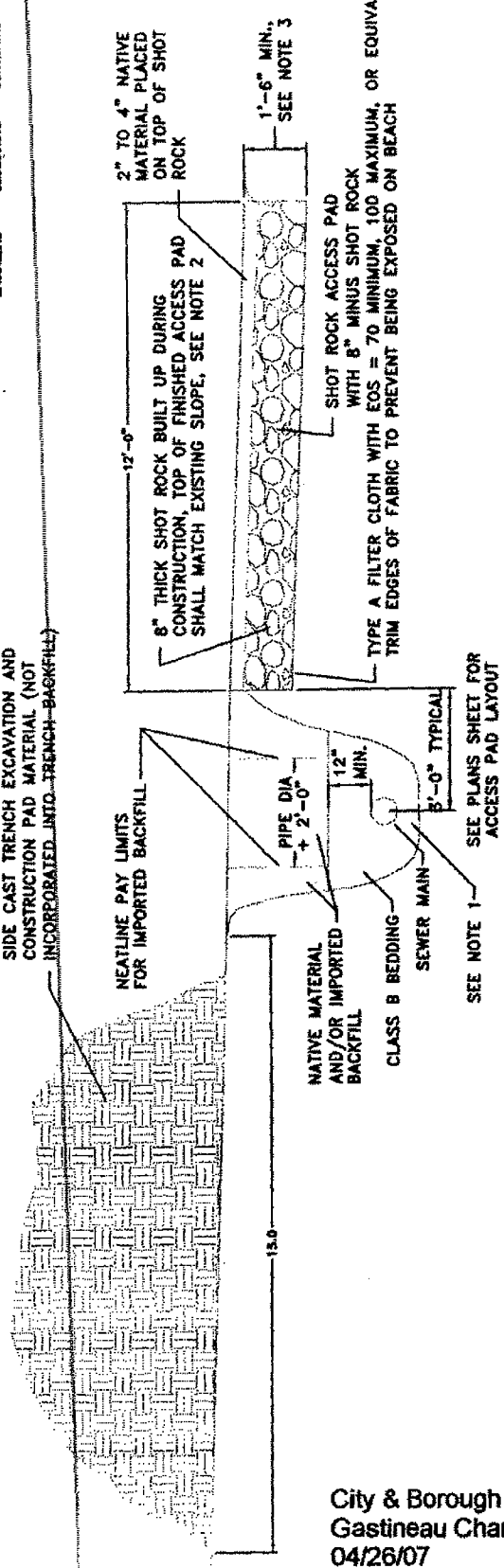
SECTION F-F NOT TO SCALE

City & Borough of Juneau
Gastineau Channel
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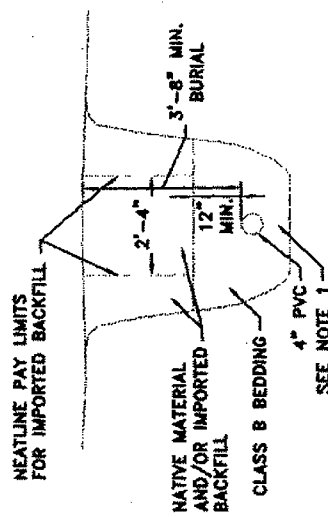
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Date Prepared:	Applicant:
MARCH 16, 2007	CITY AND BOROUGH OF JUNEAU
NORTH DOUGLAS SEWER	
Project: NORTH DOUGLAS SEWER	
Location: Sec. 15,16,21,22, T. 41S., R. 67E., CRM NORTH DOUGLAS, JUNEAU, ALASKA	
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SHEET 18 OF 22	SITE PLAN AND SECTION

SIDE CAST TRENCH EXCAVATION AND
 CONSTRUCTION PAD MATERIAL (NOT
 INCORPORATED INTO TRENCH-BACKFILL)



TYPICAL SECTION BEACH LINE WITH ACCESS PAD
 N.T.S.

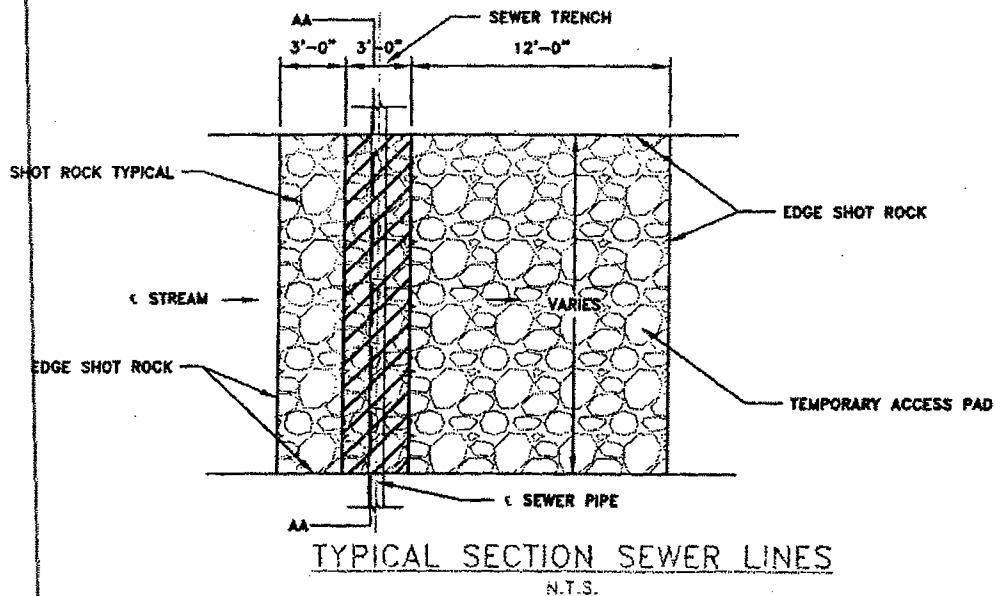
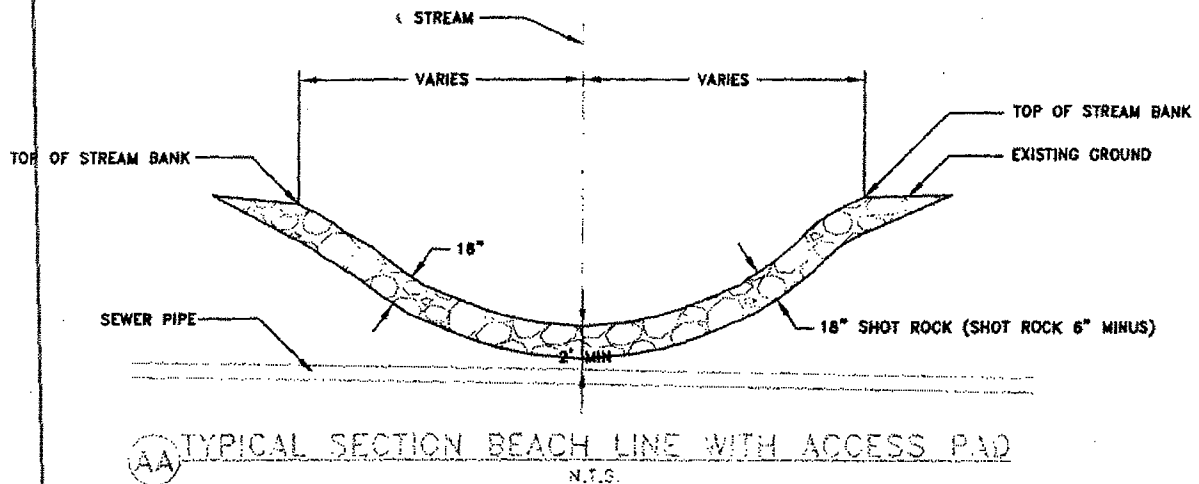


TYPICAL SECTION SERVICE LINES
 N.T.S.

NOTES

1. PIPE SHALL BE SEPARATED BY 6 INCHES MINIMUM FROM BOULDERS, BEDROCK OR SIMILAR MATERIALS.
2. TOP OF ACCESS PAD MAY BE BUILT UP TO SUPPORT CONSTRUCTION EQUIPMENT. AFTER COMPLETION OF CONSTRUCTION, REMOVE EXCESS MATERIAL TO MATCH SLOPE OF BEACH PRIOR TO CONSTRUCTION.
3. DEPTH MAY INCREASE AS NECESSARY TO SUPPORT CONSTRUCTION EQUIPMENT.

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MARCH 16, 2007	CITY AND BOROUGH OF JUNEAU
NORTH DOUGLAS SEWER	
Project: NORTH DOUGLAS SEWER	
Location: Sec. 15,16,21,22, T. 41S., R. 67E., CRM	
NORTH DOUGLAS, JUNEAU, ALASKA	
Waterway: GASTINEAU CHANNEL	
Scale: NA	Prepared by: R&M ENGINEERING
SHEET 19 OF 22	TYPICAL SECTIONS



NOTES

- 1) PIPE SHALL BE SEPARATED BY 6 INCHES MINIMUM FROM BOULDERS, BEDROCK OR SIMILAR MATERIALS.

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MARCH 16, 2007	CITY AND BOROUGH OF JUNEAU
NORTH DOUGLAS SEWER	
Project: NORTH DOUGLAS SEWER	
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SHEET 20 OF 22	TYPICAL SECTIONS

ANCHOR EACH BALE WITH
A MINIMUM OF 2 1"x1"
WOODEN STAKES OR
RE-BARS (SEE NOTE 2)

DRIVE TOP OF STAKE FLUSH
WITH TOP OF STRAW BALE

HORIZONTAL BINDING
WIRE OR TWINE

COMPACTED SOIL TO
PREVENT PIPING
(SEE NOTE 4)

FILTERED RUNOFF

DIRECTION
OF FLOW

4" MIN.
(SEE NOTE 3)

SIDE VIEW

POINT A
(SEE NOTE 6)

FILL ALL GAPS
IN BARRIER
(SEE NOTE 5)

POINT B
(SEE NOTE 6)

POINT A
(SEE NOTE 6)

ELEVATION
OF POINT B

BOTTOM OF TRENCH AND
STRAW BALES (SEE NOTE 3)

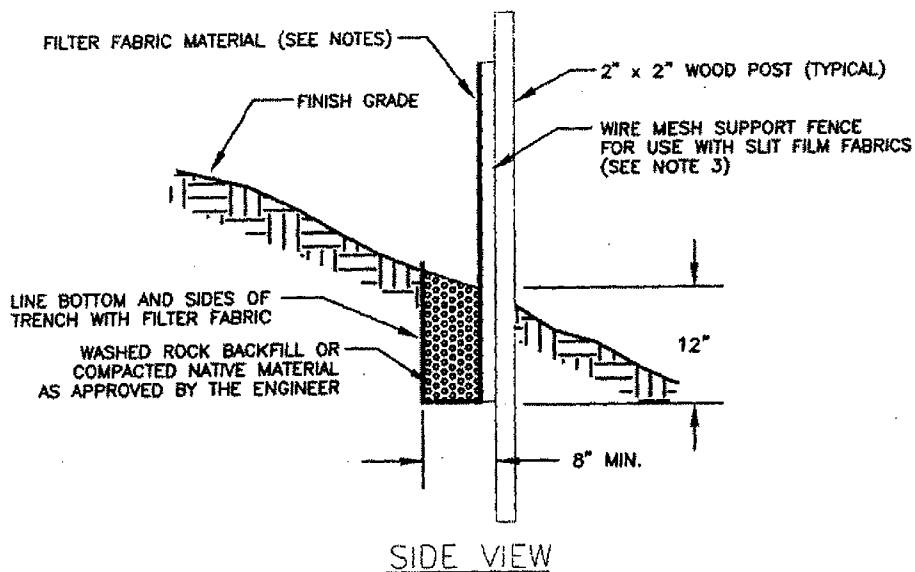
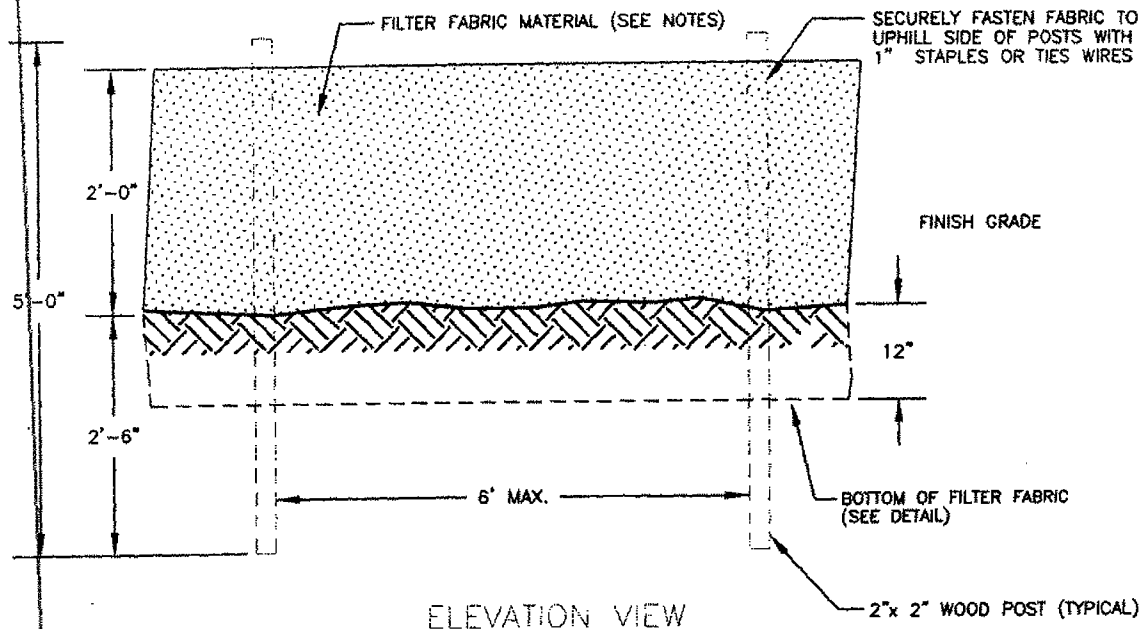
STRAW BALES IN DRAINAGE WAY

NOTES:

1. BALES SHALL BE PLACED IN A SINGLE ROW, LENGTHWISE ON THE CONTOUR, WITH ENDS OF ADJACENT BALES TIGHTLY ABUTTING ONE ANOTHER.
2. DRIVE THE FIRST STAKE IN EACH BALE TOWARDS THE PREVIOUSLY LAID BALE TO FORCE THE BALES TOGETHER.
3. TRENCH DEPTH SHALL BE A MINIMUM OF 4". ALL GRASS AND OTHER MATERIAL THAT WILL ALLOW UNDERFLOW SHALL BE REMOVED. TRENCH WIDTH SHALL BE EQUAL TO THE WIDTH OF THE BALES.
4. BACKFILL SHALL BE BUILT UP 4" AND COMPACTED ON UPHILL SIDE OF BARRIER.
5. FILL CHINKS BY WEDGING LOOSE STRAW BETWEEN BALES ON UPHILL SIDE PRIOR TO BACKFILLING AND COMPACTING.
6. POINTS A SHALL BE HIGHER THAN POINT B.

Date Prepared:	Applicant:
MARCH 16, 2007	CITY AND BOROUGH OF JUNEAU
STRAW BALE BARRIER	
Project: NORTH DOUGLAS SEWER	
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Waterway: GASTINEAU CHANNEL	
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SHEET 21 OF 22	TYPICAL SECTIONS

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NOTES:

1. FILTER FABRIC SHALL BE CUT FROM A CONTINUOUS ROLL OF FABRIC. JOINTS SHALL BE KEPT TO A MINIMUM. JOINTS SHALL BE AT SUPPORT POSTS WITH A MINIMUM OF 6" OF OVERLAP.
2. FILTER FABRIC TYPE SHALL BE APPROVED BY THE ENGINEER.
3. MORE SUPPORT POSTS MAY BE SUBSTITUTED FOR WIRE MESH AS APPROVED BY THE ENGINEER.
4. FILTER FABRIC FENCE SHALL BE REMOVED AFTER UPSLOPE HAS BEEN STABILIZED; RETAINED MATERIALS SHALL BE REMOVED FROM SITE AND PROPERLY DISPOSED OF.

Date Prepared:	Applicant:
MARCH 16, 2007	CITY AND BOROUGH OF JUNEAU
FILTER FABRIC FENCE	
Project: NORTH DOUGLAS SEWER	
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Waterway: GASTINEAU CHANNEL	
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SHEET 22 OF 22	TYPICAL SECTIONS

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